

Notice of Allowability

Application No.

10/707,277

Examiner

Alan S. Chen

Applicant(s)

CHEN ET AL.

Art Unit

2182

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to app. filed 12/02/2003.
2. ☒ The allowed claim(s) is/are 1-20.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 12/02/2003
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

The application has been amended as follows:

- Paragraph 4, line 6, replace "use" with --used--.
- Paragraph 6, line 6, replace "the" with --then--.

Allowable Subject Matter

2. Claims 1-20 are allowed.

The following is the statement of reasons for the indication of allowable subject matter: The prior art disclosed by the applicant and cited by the Examiner fail to teach or suggest, alone or in combination, **all** the limitations of the independent claim(s) (claims 1, 13 and 19), particularly single chip flash device comprising a flash microcontroller having a processor a flash memory controller and flash storage blocks all within one chip, where initial program/boot code is loaded from the flash memory blocks and not ROM separate from the flash memory blocks (claims 13,19 and corresponding dependent claims), and also having the flash microcontroller being integrated with the flash memory blocks and the flash memory blocks being block addressable and not randomly addressable (claim 1 and corresponding dependent claims).

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Pat. Pub. No. 2004/0153595 to Sukegawa et al. (Sukegawa) discloses various functional equivalents to what is claimed, i.e., serializer/deserializer (Fig. 2, element 250), processor (Fig. 2, element 235), flash memory blocks (Fig. 2, element 215), etc., but does not disclose loading the initial program code from the flash memory or expressly that block addressing is used.

US Pat. Pub. No. 2004/0034765 to James disclose using a flash memory device to boot a personal computer system, where boot information stored in flash memory and loaded into RAM, but James pertains to loading the boot information into a host device and not using the boot information for the flash memory device itself.

US Pat. Pub. No. 6,292,863 to Terasaki et al. (Terasaki) discloses peripheral USB storage card (Fig. 4) have data/address/control lines (Fig. 4, element "C") interfacing flash memory and having a flash controller, however Terasaki does not disclose the flash memory containing the initial program code.

US Pat. No. 5,835,760 to Harmer discloses BIOS can be stored on a peripheral mass storage device instead of ROM. Harmer does not disclose expressly a flash drive or that the BIOS is loaded in the RAM of the peripheral mass storage device (BIOS is loaded into host system RAM).

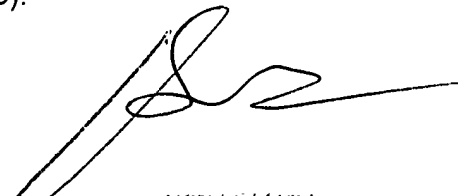
4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alan S. Chen whose telephone number is 571-272-4143. The examiner can normally be reached on M-F 9am-5pm.

Art Unit: 2182

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim N. Huynh can be reached on 571-272-4147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ASC
05/02/2006



SUPERVISORY PATENT EXAMINER
5/4/06